# Introduction to the Minitrack
# Behavioral Economics in the Digital Economy: Digital Nudging and Interface Design

Markus Weinmann
University of Cologne / Erasmus University
weinmann@wiso.uni-koeln.de

Christoph Schneider
IESE Business School
cschneider@iese.edu

Research in psychology and behavioral economics has repeatedly demonstrated that people act in boundedly rational ways, and their decision making is influenced by various heuristics and biases, either for the good or bad: Heuristics can aid decision making when people face simple, recurrent problems; they simplify problem-solving by reducing the amount of information to be processed. However, heuristics can also lead to cognitive biases and introduce systematic errors when people face complex decisions.

Examining the effects of psychological, cognitive, emotional, and social factors on judgment and decision making, research has repeatedly shown that the context matters when making judgments or decisions. People's decisions are not only influenced by the content of the choices, but also the way the choices are presented, and "nudges[1]," such as setting defaults or framing decisions, can influence people's behavior substantially.

Today, choices are increasingly made in digital contexts, thus it is important to understand the psychological effects of user-interface design on people's choices. In particular, it is important to understand how "digital nudging[2]" influences online decision making.

The main purpose of this minitrack is to explore and extend, as well as exchange, innovative research related to online decision making in the context of information systems design. In particular, this minitrack aims to examine the main applications of behavioral interventions and digital nudges in information-systems design, in particular, research with an emphasis on the effects of interface design on users' behavior, judgment, and decision making in online environments.

This year marks the fifth edition of the minitrack on behavioral economics and digital nudging. While findings from behavioral economics have received much attention, digital applications of behavioral economics—e.g., digital nudging—are just beginning to be explored. As information systems allow to dynamically adapt and personalize content, they provide unique opportunities to implement concepts from behavioral economics. Our goal is to provide a platform to discuss cutting-edge research on digital nudging and online decision making.

The four papers accepted for this year's minitrack span a range of topics related to digital nudging. The first paper by Marcin Bartosiak, titled "Not So Digital After All? A Look at the Nature of Digital Nudging through the Prism of the Digital Object Concept," presents the state of recent literature on digital nudging and places it in the current debate on digital objects. It focuses on conceptualizations of technology behind digital nudging and digital choice environments. From this perspective, the author identifies types of digital nudging present in IS literature, discusses how digital object properties can transform the process of nudging, and gives recommendations for future research.

In the second paper by Arnold Wibmer, titled "Nudging Raters towards Feedback: Effects of Regulatory Focus and Idea Partitioning on Rater's Attendance on and their Tendency to Follow Feedback Information in Idea Selection," the author shows that the susceptibility to anchor cues depends on internal (human characteristics) and external (environmental) factors. Using eye-tracking, the author finds that the anchoring effect is less salient when raters were primed with prevention focus, although they searched more extensively for feedback information than their counterparts. In addition, the effect is reversed when the number of simultaneous presented ideas per subset is increased.

In the third paper, titled "Please Mind the Stress: The Influence of Technostress on Mindset-Driven Sustainable Consumption in an Online Shopping Context," Katharina Schumacher, Leonore Peters, and Jasmin Feste explore both the concept of mindset as a

[1] Thaler, R.H., & Sunstein, C.R. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. Yale University Press, New Haven & London.

[2] Weinmann, M., Schneider, C., & vom Brocke, J. (2016). "Digital Nudging," *Business & Information Systems Engineering*, 58(6): 433–436.

Schneider, C., Weinmann, M., & vom Brocke, J. (2018). "Digital Nudging—Influencing Choices by Using Interface Design," *Communications of the ACM*, 61(7), 67–73.

URI: https://hdl.handle.net/10125/79867
978-0-9981331-5-7

driver for sustainable consumption and the diminishing effect of stress on this relationship. Results based on 121 participants show a positive indirect effect of growth mindset on consumers' sustainable product choice, mediated by their general preference for sustainable products, while technostress has a negative moderating effect on the relationship between preference for and choice of sustainable products.

The fourth paper by Francis Joseph Costello, Jinho Yun, and Kun Chang Lee, titled "Digital Dark Nudge: An Exploration of When Digital Nudges Unethically Depart," explored the consequences of digital nudges unethically departing from their intended purpose, defined in this paper as a digital dark nudge (DDN). This paper explored DDNs using an online experiment where multiple scenarios were used to study the economic intentions and emotional perceptions of DDNs from consumers to help shed light on this phenomenon. Empirical results show increasing evidence of the perverse effects of using DDNs in online e-commerce.

We would like to thank the researchers who submitted their work to this minitrack. We also thank the many reviewers for their outstanding contributions and their help in ensuring the quality of the papers in this minitrack.